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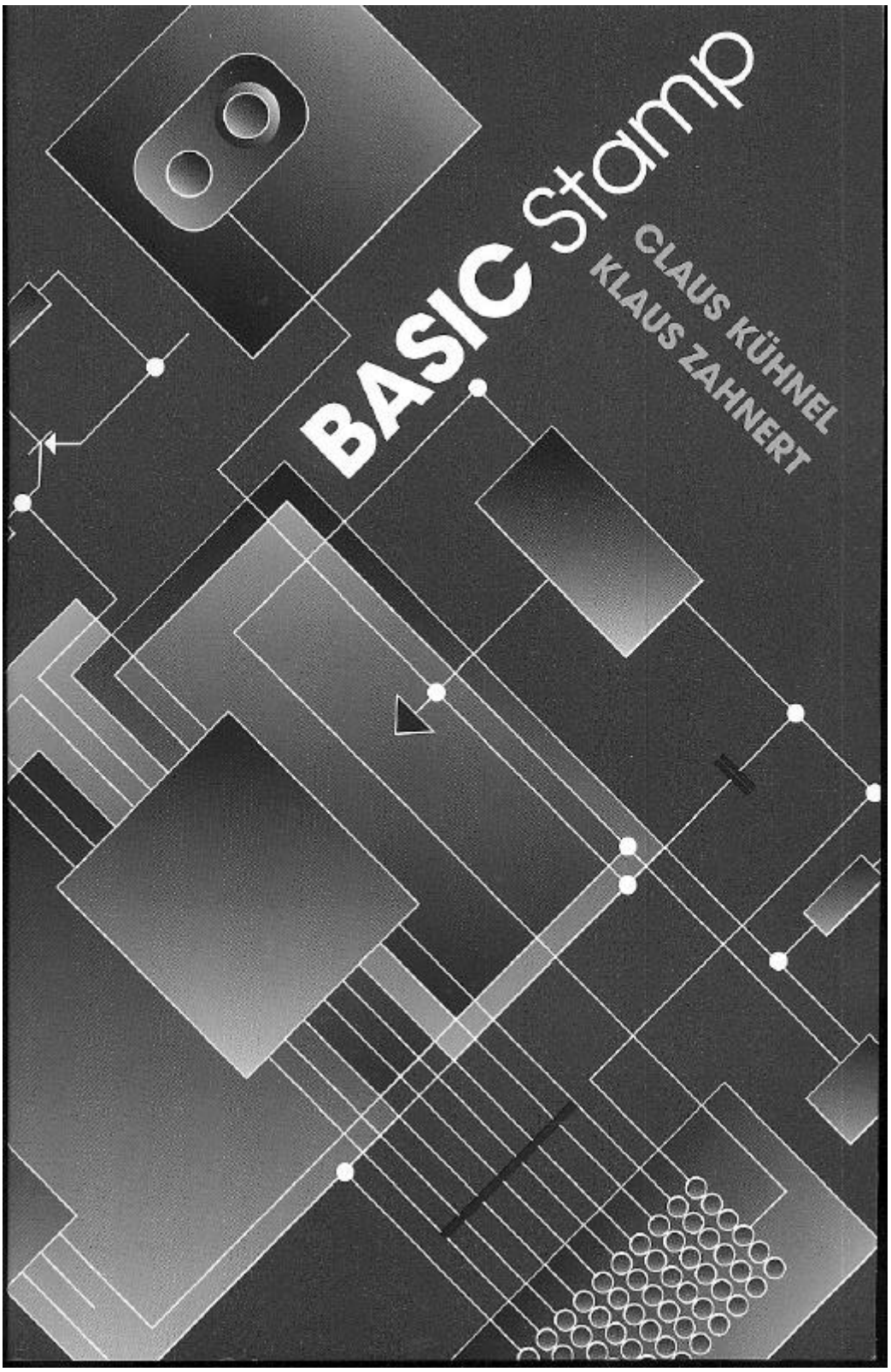

# *Contents*

***1 Introduction to Microcontrollers 1***

*1.1 Function Groups of a Simple Microcontroller 1*
*1.2 Some Important Terms 8*

***2 Hardware Base of BASIC Stamp I and II 11***

*2.1 Internal Architecture 11*
*2.2 Peripheral Functions 14*
*2.2.1 Oscillator 14*
*2.2.2 Reset 16*
*2.2.3 I/O Ports19*
*2.2.4 Internal Timer 20*
*2.3 Technical Data of PIC16C56 and PIC16C57 20*

***3 BASIC Stamp 23***

*3.1 BASIC Stamp I Device 23*
*3.2 BASIC Stamp Version D 25*
*3.3 BS1-IC 26*
*3.4 BASIC Stamp II Device 27*
*3.5 BS2-IC 28*

***4 BASIC Stamp Development System 33***

*4.1 System Requirements 33*
*4.2 Parallax's Programming Package 33*

*4.3 Preparations for BASIC Stamp I Program Development 35*
*4.4 Preparations for BASIC Stamp II Program Development 36*
*4.5 Working with the Development System 38*
*4.5.1 Editing Programs 38*
*4.5.2 Programming BASIC Stamp I 41*
*4.5.3 Programming BASIC Stamp II 44*
*4.6 Some Tools 51*
*4.6.1 Program STMPSIZE 51*
*4.6.2 Program BSLOAD 52*
*4.6.3 Programs for Serial Communication 52*

***5 PBASIC for BASIC Stamp I and BASIC Stamp II 55***

*5.1 PBASIC Instruction Set 55*
*5.2 Explanations of Some PBASIC Instructions 86*
*5.2.1 Query a Key with BUTTON 86*
*5.2.2 Generating Tones with SOUND 88*
*5.2.3 Digital-to-Analog Conversion with PWM 88*
*5.2.4 Resistor Measurement with POT 92*
*5.3 Numeric Operations 94*
*5.4 Source Text Formatting 99*

***6 On the Way to Application: The Practical Use of BASIC Stamp 101***

*6.1 Experiments and Some Tools 101*
*6.2 Hints for Programming and Debugging 104*
*6.3 Runtime of PBASIC Instructions 107*

***7 BASIC Stamp Applications 109***

*7.1 Basics for Applications 109*
*7.1.1 [BS1]--RS232 Interface Between BASIC Stamp and PC 110*
*7.1.2 [BS1]--Communication Between BASIC Stamps 120*
*7.1.3 Electrical Pin Conditions for Analog and Digital I/Os 125*
*7.2 More Complex Applications 126*
*7.2.1 BASIC Stamp Network 126*
*7.2.2 Communication Between BASIC Stamps Over Longer Distances 146*

*7.2.3 [BS2]--Remote Alarm Message via Modem 153*
*7.2.4 [BS1]--Connecting a Keyboard 158*
*7.2.5 Control of Digital Displays 161*
*7.2.6 Management of Time Information 187*
*7.2.7 I/O Extension with I%r2%rC Circuits200*
*7.2.8 [BS1]--D/A Conversion with WM8016 217*
*7.2.9 Change of Circuit Parameters with NSP Devices 222*
*7.2.10 [BS1]--Motion Detection with a Radar Sensor 233*
*7.2.11 [BS1]--Distance Measurement with IR Triangulation 236*
*7.2.12 [BS2]--Scale Based on Frequency Output244*
*7.2.13 [BS2]--Generate and Recognize DTMF Tones 246*
*7.2.14 [BS1]--Light Measurements with TSL230 Sensor 251*
*7.2.15 [BS2]--Serial Reading from Phone Card 257*
*7.2.16 [BS2]--Home Automation with X-10 261*

***Appendix A Reserved Words 267***

***Appendix B BASIC Stamp--Versions of Firmware 271***

***Appendix C HAYES Commands--The Most Important Modem Instructions 273***

***Appendix D Product Sources 275***

***Index 279***

# *Introduction to Microcontrollers* *1*

This book describes two microcontrollers from Parallax, Inc., BASIC Stamp I and II, as well as some applications. Both BASIC Stamps are suited for many types of users. BASIC Stamp users cover a wide range--from electrical engineers to technicians who need tools for measurement and control, to students on different levels, and to hobbyists or beginners in electronics. In addition, the educational sector is very much impressed with BASIC Stamp.

Before describing the features of a microcontroller, we need to make clear what a microcontroller is. While a professional should be on familiar ground, a hobbyist or a beginner would need some clarification.

This chapter is dedicated to the last type of readers. The professional can start with the next chapter. After reading this chapter, the beginner knows the terms and can better understand the following chapters.

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Electronics/Microcontrol

# BASIC Stamp

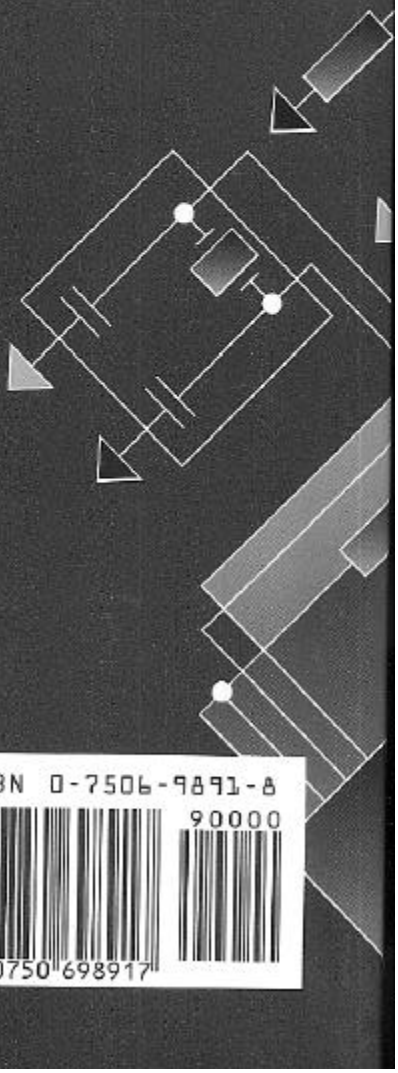
CLAUS KÜHNEL • KLAUS ZAHNERT

***BASIC Stamp*** covers both the hardware and software sides of the Parallax BASIC Stamp I and II microprocessor operation and design. The BASIC Stamp is built on PIC microcontroller hardware and uses PBASIC as its programming language, which makes it simple to use and modify even for beginners and versatile enough to solve professional problems.

Once the hardware operations and PBASIC instruction sets are established, ***BASIC Stamp*** walks you through applications suitable for designers as well as the home hobbyist. These applications can be used as is or can be modified to suit your needs. Because the BASIC Stamp's hardware and software are fully integrated, you can switch it on as soon as you finish your setup.

**Dr. Claus Kühnel** is the engineering manager for Multanova AG in Switzerland. He is a member of the IEEE and has a strong background in microcontroller design. Dr. Kühnel has written books and articles for the German and Swiss electronics markets.

**Dr. Klaus Zahnert** is a retired measurement systems designer and an active electronics hobbyist. He writes books and articles for the German electronics market.



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